

UNINTENTIONAL INJURIES

Context

According to the most recent information available for Wisconsin (Bureau of Health Information, 1999b), unintentional injuries are the number one cause of death among people age 15 to 24, accounting for 246 deaths (46%) in 1997. Crashes that occur as the result of driving while under the influence of alcohol are a major factor in unintentional injuries. Wearing seat belts and helmets can prevent serious injuries involving motor vehicles.

Seat belt use is estimated to reduce motor vehicle fatalities by 40 to 50 percent and serious injuries by 45 to 55 percent (National Committee for Injury Prevention and Control, 1989). Similarly, unhelmeted motorcyclists are two times more likely to incur a fatal head injury and three times more likely to incur a nonfatal head injury than helmeted riders (National Highway Traffic Safety Administration, 1980). In addition, the risk of head injury for unhelmeted bicyclists is more than six and one-half times greater than for helmeted riders (Thompson, Rivara & Thompson, 1989).

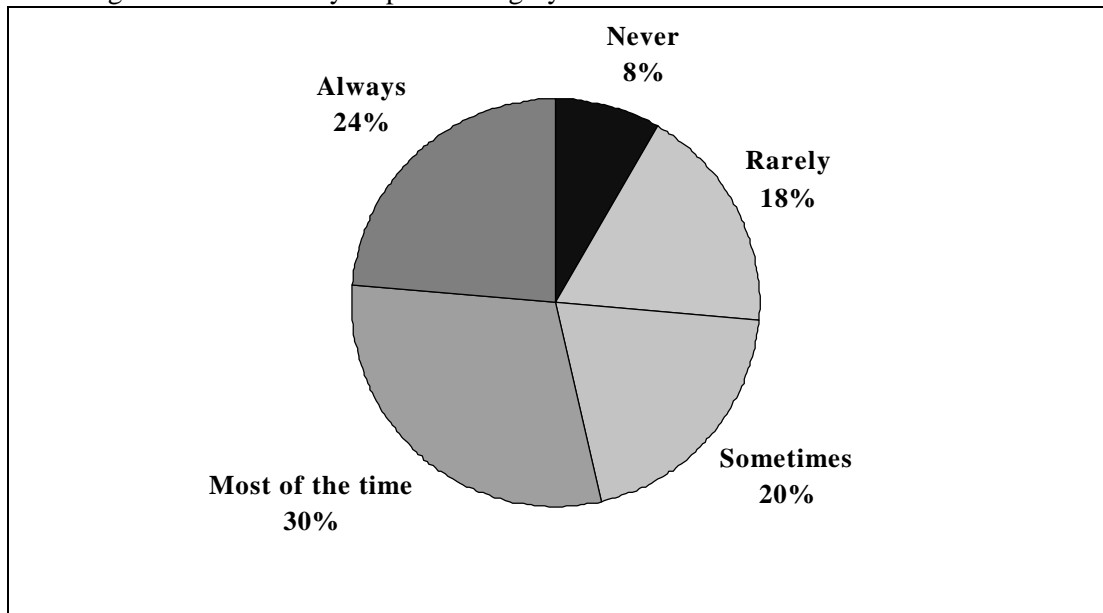
Highlights

- Thirty-eight percent of students reported riding with a driver who had been drinking at least once in the past month.
- Twenty-eight percent of high school seniors drove after drinking alcohol in the past 30 days.
- Both motorcycle and bicycle helmet use increased between 1993 and 1999.
- Male students reported higher risk behaviors than female students on every unintentional injury measure.

General Prevalence Rates

Twenty-four percent of all students said that they “always” wore their seat belts when riding in a car driven by someone else (see Figure 1). This percentage rises to 54 percent when we include those who said they wore their seat belts “most of the time”. This still leaves 20 percent who said they “sometimes” and 26 percent who said they “never” or “rarely” wore a seat belt when riding in a car with another driver. By comparison, 61 percent of adults who responded to the 1997 Wisconsin Behavioral Risk Factors Survey (Bureau of Health Information, 1998) reported always wearing their seat belts.

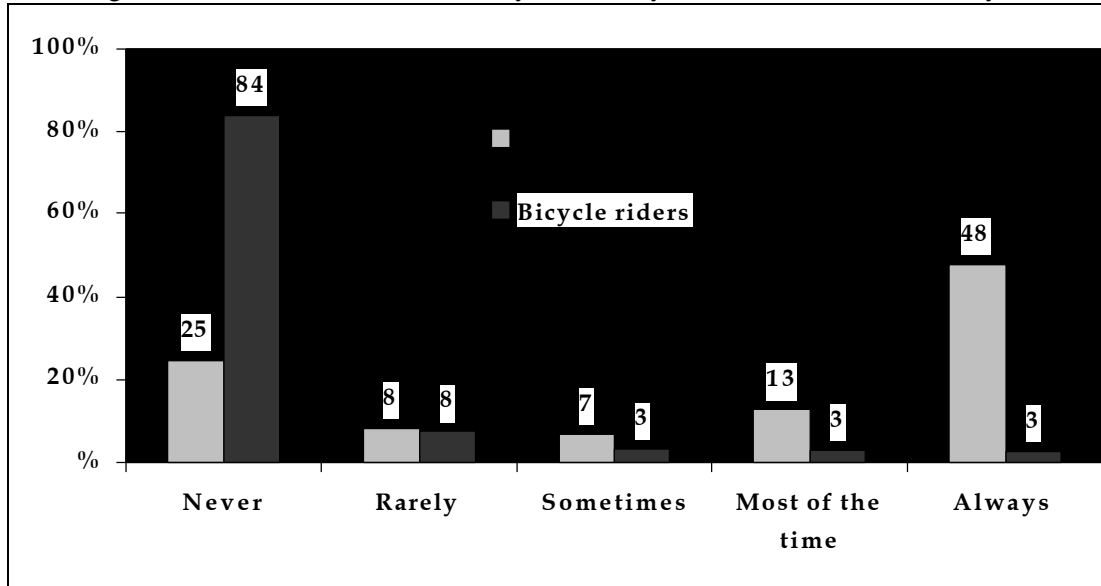
Figure 1. Seatbelt Use
Percentage of all students by response category.



Slightly more than 30 percent of students reported riding a motorcycle in the past 12 months. Of those that rode a motorcycle, one-third said that they “never” or “rarely” wore a helmet. Nearly two thirds said they “always” or “most of the time” wore a motorcycle helmet (see Figure 2).

Figure 2. Motorcycles and Bicycle Helmet Use

Percentage of all students who rode motorcycles or bicycles in the last 12 months by helmet use.



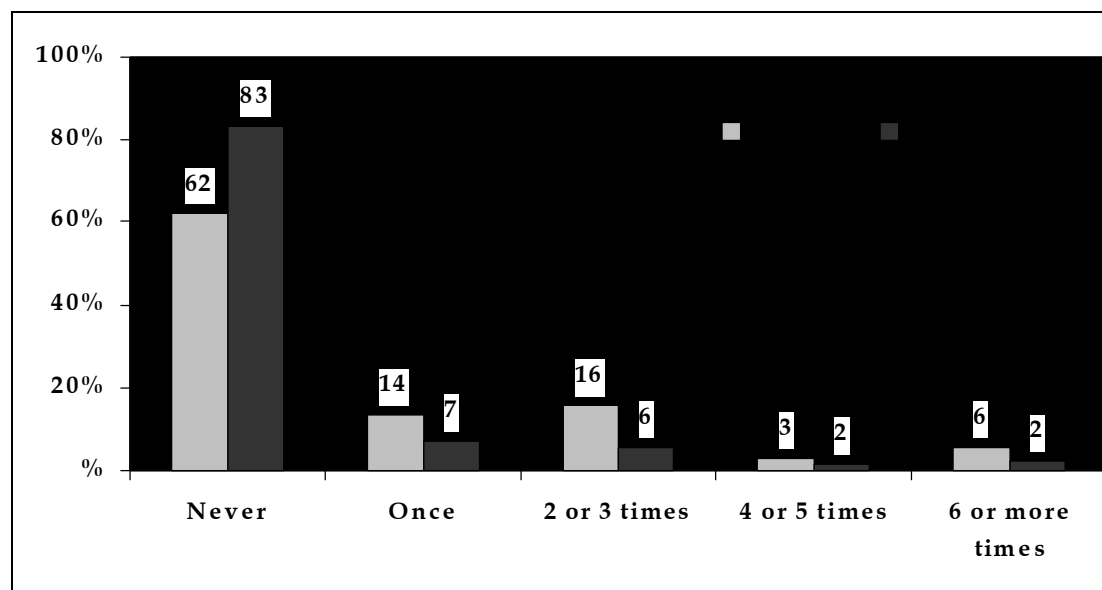
Nearly eighty percent of high school students reported riding a bicycle in the past 12 months. Of these, 92 percent said that they “never” or “rarely” wore a bicycle helmet when riding. Only five percent reported wearing a helmet “always” or “most of the time.”

¹ This percentage differs from Figure 2 due to rounding error.

Students were asked how many times during the past 30 days they had ridden in a car with a driver who had been drinking alcohol and had driven a car or other vehicle after they had been drinking alcohol. Thirty-nine percent reported riding with a driver who had been drinking at least once in the past month (see Figure 3). Seventeen percent said that they had driven after drinking². By comparison, only about five percent of adult respondents to the 1997 Wisconsin Behavioral Risk Factors Survey reported the same behavior (Bureau of Health Information, 1998). Interestingly, juveniles only account for one percent of all arrests for driving under the influence (Wisconsin Statistical Analysis Center, 1996).

Figure 3. Drinking and Driving Frequency

Percentage of all students by the number of times in the past 30 days they had either ridden with a driver who had been drinking or drove after having alcohol.



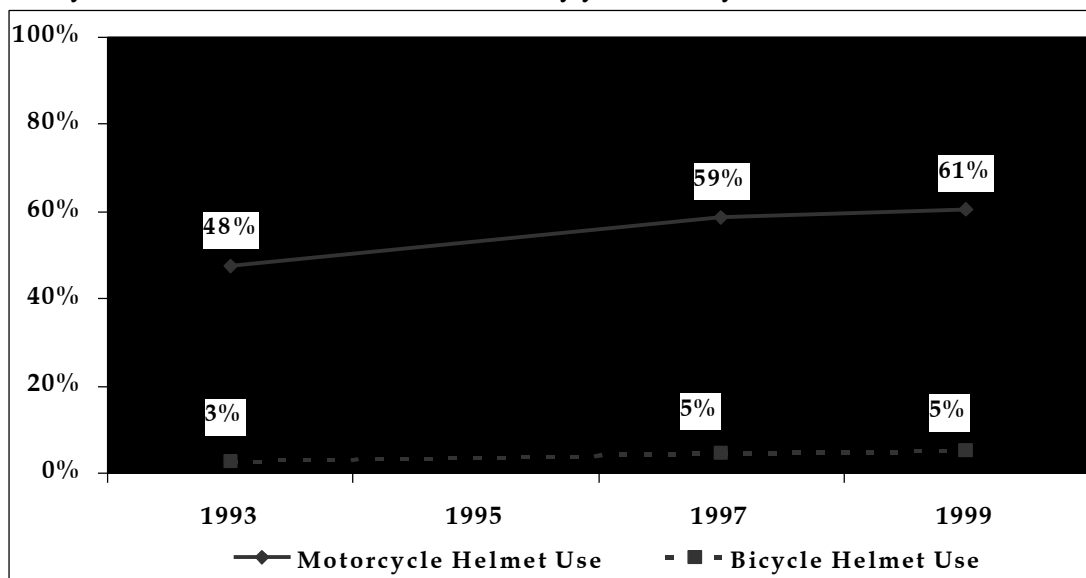
² It is important to note that this statistic likely underestimates the real proportion of drivers who drive after drinking since most ninth and many tenth graders cannot drive.

Trends

Though there was no significant change in reported seatbelt use between 1993 and 1999, there were significant increases in reports of helmet use over the same period (see Figure 4). The percentage of motorcycle riding students who said they wore helmets “always” or “most of the time” increased from 48 to 61 percent while the percentage who reported “never” or “rarely” using a helmet decreased by ten percent. Similarly, the percentage of students who rode bicycles who reported wearing helmets either “always” or “most of the time” increased from three percent to five percent. There were no significant differences in the percentage of students who reported riding with a driver who had been drinking or driving after having had any alcohol to drink.

Figure 4. Changes in Helmet Use: 1993-1999

Percentage of students who rode motorcycles or bicycles in the last 12 months who said that they “always” or “most of the time” wore a helmet by year of study.



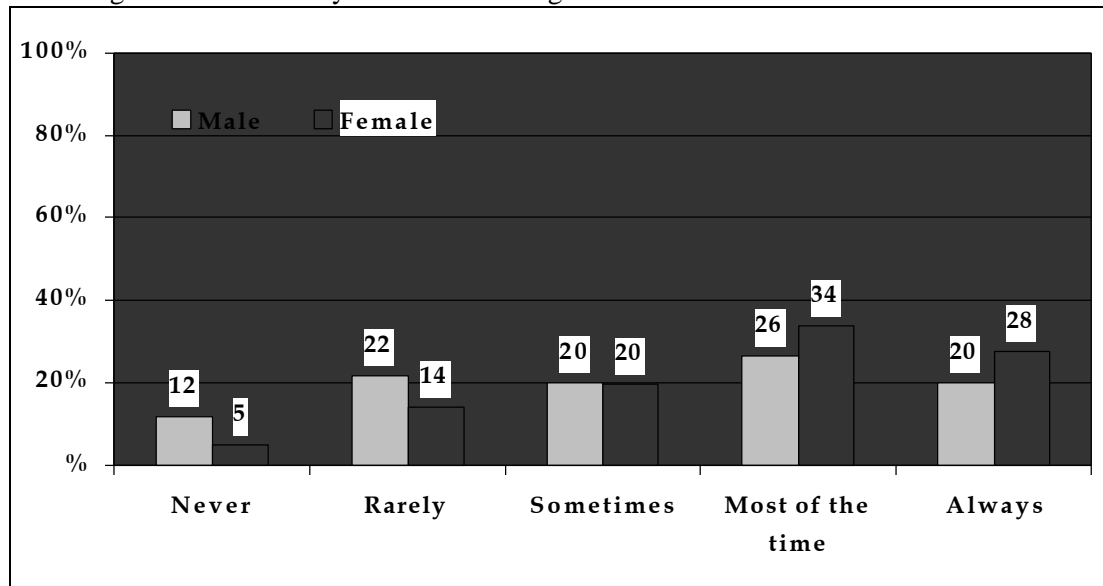
Comparisons by Demographic Groups

Gender

There were a number of significant differences between male and female students in health-risk behaviors that expose students to a greater chance of unintentional injuries. On each measure, male students were more likely to report dangerous behaviors than female students. Male students were significantly more likely to report “never” or “rarely” wearing seat belts (see Figure 5). The percentage of male student motorcycle riders reporting “never” or “rarely” wearing a motorcycle helmet was significantly higher than female student motorcycle riders³. Male students were also slightly more likely to say that they “never” or “rarely” wore a bicycle helmet though this difference did not achieve statistical significance. Male students were significantly more likely than female students to report both riding with a driver who had been drinking alcohol and driving after drinking.

Figure 5. Seatbelt Use by Gender

Percentage of all students by seatbelt use and gender.



³ Of the 419 students who reported riding a motorcycle in the past 12 months, 39 percent were female and 61 percent were male.

Grade Level

There were no significant differences in the prevalence rates of students wearing motorcycle or bicycle helmets among the different grade levels. Likewise, there was no significant difference among those who said that they had ridden with a driver who had been drinking alcohol. However, there was a significant difference in the percentage of students who reported that they had driven after drinking alcohol. The data demonstrate a steady increase in the prevalence of having driven after drinking alcohol at least once in the past 30 days between ninth and twelfth grade (see Figure 6). Only 5 percent of ninth graders reported this risk factor, while 28 percent of seniors report the same activity. Much of this difference, though, is due to the fact that most ninth graders cannot drive.

Figure 6. Drinking and Driving by Grade Level.

Percentage of students who said that they had driven at least once in the past 30 days after drinking alcohol by grade level.

